

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS

CYTOLOGIX CORPORATION,

Plaintiff,

v.

VENTANA MEDICAL SYSTEMS, INC.,

Defendant.

Civil Action No. 04-11783 (RWZ)

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**PLAINTIFF'S MEMORANDUM IN SUPPORT OF ITS MOTION FOR REMAINING  
CLAIM CONSTRUCTION AND PARTIAL SUMMARY JUDGMENT OF  
INFRINGEMENT**

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**REDACTED VERSION**

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## I. INTRODUCTION

In this patent infringement case, Plaintiff CytoLogix Corporation ("CytoLogix") alleges that Ventana Medical Systems, Inc. ("Ventana") infringes U.S. Patent Nos. 6,541,261 ("the '261 patent") and 6,783,733 ("the '733 patent"). For both patents, the accused products are Ventana's BenchMark XT and BenchMark LT tissue staining instruments.

This Court has already construed some of the key language in the patents-in-suit, in this case and in an earlier case between the parties. There are, however, a few additional disputed terms that require construction.

Because the structure and operation of Ventana's BenchMark XT and LT systems is not in dispute, the issue of infringement is amenable to summary judgment. Accordingly, CytoLogix now requests that the Court: (a) construe the remaining disputed terms in the patents-in-suit; and (b) find that Ventana has infringed both the '261 and '733 patents, and grant partial summary judgment of infringement.

## II. PROCEDURAL STATUS

At least two of the disputed terms of the '261 and '733 patents were previously construed by this Court. In this motion, CytoLogix will embrace all prior constructions; it will not seek to re-litigate any previously decided claim construction disputes.<sup>1</sup>

With respect to the '261 patent, CytoLogix filed a Motion for Claim Construction and Summary Judgment of Infringement in December 2005, in the early stages of this case. (Doc. Nos. 42-45.) The central issue in that motion was the meaning of the claim phrase "moving the platform and a liquid dispenser relative to each other." CytoLogix argued that this phrase required only relative motion between the slide platform and the liquid dispenser—i.e., the

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<sup>1</sup> CytoLogix, respectfully, preserves all right to appeal any prior claim construction where its proposed construction was not adopted.

limitation would be satisfied by keeping the slide platform stationary and moving the liquid dispenser. Ventana countered that the phrase "requires moving both 'the platform' and 'a liquid dispenser.' It does not permit moving only one of them." (D.I. 59, at 6; quoted in Memorandum of Decision, D.I. 64, at 2.) After extensive briefing and a Hearing, the Court sided with Ventana, interpreting the phrase to require "Moving both the moveable platform and a moveable liquid dispenser relative to each other." (D.I. 64, at 7.) The Court then denied CytoLogix's motion. (Id.)

In the earlier motion papers, however, CytoLogix noted that "even if the Court adopts Ventana's construction, the BenchMark XT and BenchMark LT still infringe." (D.I. 60, at 18 n.7.) We explained that while Ventana's slide platform does not rotate like the platform in CytoLogix's specification, the platform "*does* move—it moves up and down to allow access to the slides." (Id.) In briefing the earlier motion, however, we agreed that the Court could assume, solely for the purposes of that motion, that Ventana's slide platform remains entirely stationary. (Id.; *see also* Court's Order, D.I. 64, acknowledging that the stationary assumption was "solely for the purposes of arguing the instant motion".)<sup>2</sup>

In November 2006, several months after the Court issued its Order, Ventana served a supplemental interrogatory response, presenting revised claim construction and non-infringement positions. (Ex. C.)<sup>3</sup> Despite prevailing on the construction of "moving the platform and the liquid dispenser relative to each other," Ventana now seeks to change the Court's construction, expanding it to add additional restrictions to the claims. In the table below, we compare the

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<sup>2</sup> CytoLogix assumed a "stationary platform" in the earlier motion for simplification. Had the Court adopted CytoLogix proposed construction, Ventana would have conceded infringement, and the up-and-down movement would have been irrelevant.

<sup>3</sup> Lettered exhibits refer to the exhibits to the Declaration of David A. Simons, filed herewith.

Court's construction to Ventana's new proposed construction. The additional limitations in Ventana adds in its supplemental interrogatory response are italicized.

Claim Phrase	Court's Construction	Ventana's Supplemental Interrogatory Response on Claim Construction
moving the platform and a liquid dispenser relative to each other	Moving both the moveable platform and a moveable liquid dispenser relative to each other. (D.I. 64, at 7.)	"Ventana contends that the phrase 'moving the platform and a liquid dispenser relative to each other' should be construed to mean moving the platform relative to a liquid dispenser and also moving the liquid dispenser relative to the platform <i>during automated processing of the slides</i> . This requires moving both the moveable platform and a moveable liquid dispenser relative to each other. <i>The movement must be roughly simultaneous and related. The slide platform moves from a first position in which liquid is dispensed from a dispenser onto a first slide, to another position in which liquid is dispensed from that same dispenser onto a second slide.</i> " <sup>4</sup> (Ex. C, at 4-5, emphasis added.)

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<sup>4</sup> This last sentence ("The slide platform moves from a first position in which liquid is dispensed from a dispenser onto a first slide, to another position in which liquid is dispensed from that same dispenser onto a second slide") was proposed in Ventana's claim construction brief, (D.I. 59, at 6), but it was not included in the claim construction adopted by the Court.

Ventana's supplemental interrogatory response also renews its argument that the claim term "platform" means a "rotary carousel." Since Ventana's slide tray does not rotate, it contends it that it lacks a "slide platform."<sup>5</sup> (Ex. C, at 3-5.)

The remaining claim construction and infringement issues for the '261 patent therefore boil down to the following: whether the up-and-down and in-and-out movement of Ventana's slide tray satisfies the "movement" required by the claim. This issue, we believe, is amenable to summary judgment.

With respect to the '733 patent, the parties dispute the constructions of the following terms: (1) "a moving platform," (2) "electronic circuitry that supplies variable amounts of electrical power to said heating elements, said electronic circuitry being mounted on the moving platform...to heat said heating elements," (3) "electronic circuitry mounted on the moving platform supplying electrical power to at least one heater...said electronic circuitry to provide an appropriate amount of electrical power to each of said heaters to heat the heaters to the processor-specified temperature"; and (4) "a user interface through which desired temperatures for microscopic slides are specified." With respect to term (4), the Court construed similar language in the other ongoing patent dispute between the parties, Case No. 01-10178 ("The 01 Case").

Again, since the structure and operation of the accused BenchMark XT/LT systems is not in dispute, CytoLogix contends that the '733 patent is amenable to summary judgment of infringement.

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<sup>5</sup> The parties fully briefed the "platform" issue in the first summary judgment motion, but the Court did not reach the issue in its Order.

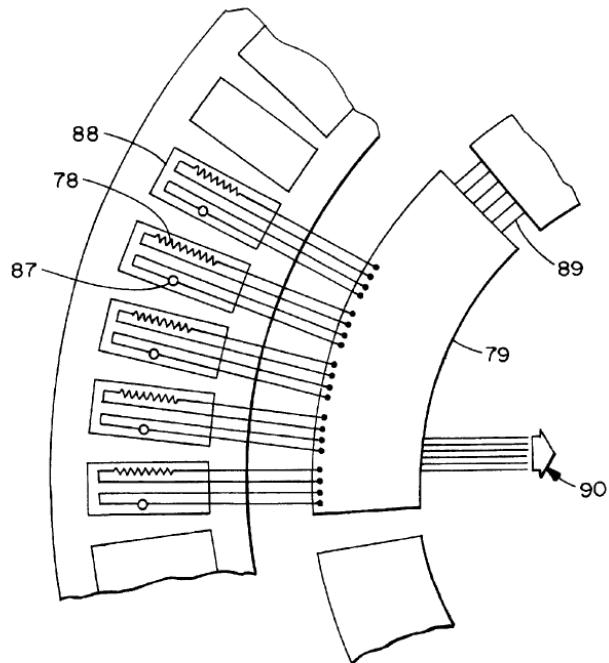
### III. FACTS

#### A. The Patents-in-Suit

The '261 and '733 patents (Exs. A and B) are related, and they share a common written description. They differ only in their list of cited references and in their claims.

The patents concern instruments and methods for staining biological samples on multiple slides simultaneously. One important advantage of CytoLogix's patented system is that different slides on the instrument can be heated to different temperatures at the same time, allowing a variety of protocols to be run simultaneously. (Ex. B, at 2:5-10.)

To heat different slides to different temperatures, the patents disclose placing separate heating elements under separate slides, and controlling those heating elements independently of each other. Part of a preferred embodiment<sup>6</sup> is shown, in part, below in Fig. 17:



**FIG. 17**

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<sup>6</sup> Column 9, line 65 of the '733 patent states that this embodiment is a "preferred embodiment of the invention."

In this preferred embodiment, each slide has its own heater (78) and temperature sensor (87). (Ex. B, at 10:18-21.) These heaters and temperature sensors are all connected to electronic circuitry boards (79) located on the moving slide platform. (Ex. B, at 10:25-32.) That circuitry (79) then communicates with a processor located off the slide platform, via a flexible cable (90), "to allow for appropriate temperature feedback and regulation." (Ex. B, at 10:36-39, 10:43-44; 9:65-10:6.)

The "temperature regulation" in this preferred embodiment works as follows. To use the instrument, an operator selects a histochemical protocol for a particular slide, using a computer (not shown). (Ex. B, at 7:33-35.) Based on the protocol, the instrument's microprocessor specifies a desired temperature for the slide. The processor receives data from the slide's temperature sensor, allowing it to determine if the temperature is too high or too low. If it's too low, the processor communicates data to the heater, via the electronic circuitry board (79), which causes power to be supplied to the heater, turning it on; if the temperature is too high, the data causes the heater to turn off. (Ex. B, at 10:49-58; 11:18-19.)

The electronic circuitry on the slide platform (boards 79), includes a "shift register." (Ex. B, at 10:62-63.) A shift register is a type of serial-to-parallel converter—it receives a stream of data bits from the microprocessor which includes instructions for multiple heaters (the "serial"), and distributes that data to the correct heaters (the "parallel"). (Ex. B, at 10:63-11:45.)<sup>7</sup>

One advantage of placing circuit boards (79) with shift registers on the moving slide platform is that "the number of wires in the service loop 90 [connecting the processor to the moving slide drawer]...are minimized." (Ex. B, at 10:58-61.) By including a shift register on

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<sup>7</sup> A "shift register" is much like the taxi line at Logan Airport. A number of passengers line up in a single line (the "serial"), held back by the dispatcher. A group of five or six taxis then pull up at once, and passengers distribute to the multiple taxis (the "parallel").

the platform, the data for multiple heaters can be sent from the computer to the slide platform over a single set of wires in the flexible cable (90). Without that shift register, the instrument would need separate wires connecting the computer to each separate slide heater and temperature sensor, an unworkable arrangement for a platform that moves.

CytoLogix asserts claims 1 and 2 of the '261 patent and claims 1, 4-6, and 10-12 of the '733 patent. The asserted independent claims of each patent are reproduced below. The remaining claims can be found in the infringement charts of Appendix A.

[261] 1. A method of processing samples mounted on microscope slides comprising:

- placing two or more microscope slides on a platform;
- providing heating elements capable of heating said slides, said heating elements being under independent electronic control and thereby capable of heating some slides to a different temperature than other slides;
- moving the platform and a liquid dispenser relative to each other;
- dispensing liquid from the dispenser onto the slides;
- and on the platform, heating one slide to a different temperature than a second slide.

[733] 1. A microscope slide stainer, comprising:

- a moving platform adapted to support a plurality of microscope slides bearing biologic samples;
- a plurality of heating elements, each heating at least one slide, the heating elements heating the slides to different temperatures;
- electronic circuitry that supplies variable amounts of electrical power to said heating elements, said electronic circuitry being mounted on the moving platform; and
- a user interface through which desired temperatures for microscope slides are specified, said user interface being mounted off of the moving platform and communicating data to said electronic circuitry on the moving platform to cause said electronic circuitry on the moving platform to supply electrical power to said heating elements to heat said heating elements to said desired temperatures.

[733] 10. An automated device for preparation or incubation of biologic samples, comprising:

- a moving platform adapted to support a plurality of biologic samples;
- a plurality of heaters positioned on the moving platform so as to provide heat to one or more samples;
- a processor that specifies the desired temperatures for the heaters, said processor being mounted off of the moving platform;

independent heating control capable of heating the heaters to different temperatures, said heating control comprising:

electronic circuitry mounted on the moving platform supplying electrical power to at least one heater; and

a data communication link between the processor and said electronic circuitry mounted on the moving platform, through which said electronic circuitry receives data from the processor to cause said electronic circuitry to provide an appropriate amount of electrical power to each of said heaters to heat the heaters to the processor-specified temperatures.

B. The Accused BenchMark XT/LT Systems

**REDACTED**

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#### IV. LEGAL STANDARDS

"[P]atent infringement analysis involves two steps: claim construction, and application of the construed claims to the accused product or process." *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1326 (Fed. Cir. 2006).

In construing claims, "the words of a claim are generally given their ordinary and customary meaning," in other words, "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (citations omitted). "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent..., and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." *Id.* at 1314 (citation omitted).

In addition to the words of the claim, the Court may consider "the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Id.* In reviewing the specification, however, the Court should not read into the claims "details of embodiments described in the patent's specification, but not present in the claim language." *TurboCare v. General Elec. Co.*, 264 F.3d 1111, 1123 (Fed. Cir. 2001); *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1122 (Fed. Cir. 1985). *See also Phillips*, 415 F.3d at 1323-24.

Although claims are generally not limited to the preferred embodiments, they should not *exclude* the preferred embodiments. "A claim construction that excludes from its scope a preferred embodiment is rarely, if ever, correct and would require highly persuasive evidentiary support." *Bowers v. Baystate Technologies, Inc.*, 320 F.3d 1317, 1328 (Fed. Cir. 2003). *See also*

*Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1308 (Fed Cir. 2003); *NeoMagic Corp. v. Trident Microsystems, Inc.*, 287 F.3d 1062, 1074 (Fed. Cir. 2002).

Summary judgment is warranted when the evidence of record shows "that there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). Literal infringement determinations are often amenable to summary judgment, since the first step in infringement analysis, claim construction, is a question of law. "Where the parties do not dispute any relevant facts regarding the accused product, . . . but disagree over possible claim interpretations, the question of literal infringement collapses into claim construction and is amenable to summary judgment." *General Mills, Inc. v. Hunt-Wesson, Inc.*, 103 F.3d 978, 983 (Fed. Cir. 1997).

## **V. THE '261 PATENT IS INFRINGED**

In its Opposition to the prior summary judgment motion on the '261 patent, Ventana argued two grounds of non-infringement: (1) that its slide tray does not move as required by the claim; and (2) that its slide tray is not a "platform." (D.I. 59, at 28-30.) In fact, the Ventana slide tray is a platform, and that platform does move. Consequently, the Ventana BenchMark XT and LT infringe claims 1 and 2 of the '261 patent.

In Appendix A, we provide infringement claim charts, citing evidence of record, demonstrating that each limitation of claims 1 and 2 of the '261 patent is satisfied. In the sections below, we discuss only the claim limitations that Ventana appears to dispute.

### A. Claim Construction

With respect to the '261 patent, Ventana's supplemental interrogatory response raises two issues of claim construction, one of which has already been decided by the Court.

1. The Court Has Already Construed "moving the slide platform and a liquid dispenser relative to each other"

In its ruling on the earlier summary judgment motion, the Court held as follows:

In light of the applicable legal standard, the parties' written submissions, and the argument of counsel, I construe the disputed claim language as follows:

Term	Court's construction
Moving the platform and a liquid dispenser relative to each other	Moving both the moveable platform and a moveable liquid dispenser relative to each other

(D.I. 64, at 7.) CytoLogix opposed this construction, and even moved to reconsider, arguing that a broader construction (relative movement) was proper. The Court denied the motion, however, reaffirming its construction.

Now, remarkably, it is Ventana that seeks to alter the Court's construction. In its supplemental interrogatory response, it proposes as follows:

Ventana contends that the phrase "moving the platform and a liquid dispenser relative to each other" should be construed to mean moving the platform relative to a liquid dispenser and also moving the liquid dispenser relative to the platform *during automated processing of the slides*. This requires moving both the moveable platform and a moveable liquid dispenser relative to each other. *The movement must be roughly simultaneous and related. The slide platform moves from a first position in which liquid is dispensed from a dispenser onto a first slide, to another position in which liquid is dispensed from that same dispenser onto a second slide.*

(Ex. C, at 4-5, emphasis added.)

Now that the Court has ruled, and denied CytoLogix's Motion to Reconsider, the Court's claim construction need not be revisited. If Ventana disagreed with the Court's construction, or believed it to be incomplete, it should have: (a) argued differently during the earlier briefing; and (b) moved to reconsider after the Order was issued. Since it did not, there is no reason the Court should revisit the construction at Ventana's behest now.

In any event, even if the Court does re-open construction of this term, Ventana's additional limitations are unwarranted. Nothing in the claim's plain language (or the specification) warrants requiring that the movement of the slide platform and the liquid dispenser be "simultaneous and related." Nothing warrants adding the limitation that the platform moves "during automated processing of the slides." And nothing warrants adding the lengthy final sentence of Ventana's construction, that "the slide platform moves from a first position in which liquid is dispensed from a dispenser onto a first slide, to another position in which liquid is dispensed from that same dispenser onto a second slide." This last sentence may be part of the embodiment disclosed in the specification, but there is no justification for importing that lengthy limitation into the claim. *See Phillips*, 415 F.3d at 1323-24.

Accordingly, the Court should not add Ventana's proposed additional limitations to its claim construction.

## 2. A "platform" Is a Horizontal Flat Surface

The parties fully briefed the "platform" issue in the earlier summary judgment motion. (See D.I. 59, at 25-28; D.I. 60, at 15-17.) The Court did not reach the issue, however, in ruling on the motion.

CytoLogix contends that the term "platform" should be afforded its plain and ordinary meaning: a horizontal, flat surface. This tracks Webster's Dictionary, which defines "platform" as "a usually raised horizontal flat surface." Webster's Collegiate Dictionary 891 (10<sup>th</sup> ed. 1996). (Ex. D.) It is also consistent with the "standard English" definition of "platform" offered by Ventana's linguist expert, Professor Nunberg, in his deposition: "a raised surface on which objects are supported or arrayed." (Ex. E, at 18.)

As explained in *Johnson Worldwide Association. v. Zebco Corp.*, 175 F.3d 985, 989 (Fed. Cir. 1999), there is a “heavy presumption in favor of the ordinary meaning of claim language.” “[A] party wishing to use statements in the written description to confine or otherwise affect a patent’s scope must, at the very least, point to a term or terms in the claim with which to draw in those statements....That is, claim terms cannot be narrowed by reference to the written description or prosecution history unless the language of the claims invites reference to those sources.” *Id.*, at 989-90 (citation omitted). *See also Phillips*, 415 F.3d at 1314. (where “the ordinary meaning of claim language as understood by a person of skill in the art [is] readily apparent...claim construction...involves little more than the application of the widely accepted meaning of commonly understood words”).

Ventana argues that "platform" should be limited to a "rotary carousel," the preferred embodiment disclosed in the specification. It is axiomatic, however, that details of embodiments described in the patent's specification, but not present in the claim language, may not be read into the claim. *TurboCare*, 264 F.3d at 1123. Here, CytoLogix deliberately chose the broader term "platform" in the claim, rather than the term "slide rotor" or "carousel" used in a description of the preferred embodiment. There is no justification for changing the claim term "platform" to "rotary carousel," simply because a carousel was a *preferred* embodiment. Indeed, the specification specifically notes that the "carousel" embodiment is only "preferable":

In accordance with one aspect of the invention, a moving plating, *preferably* a carousel, is adapted to support a plurality of microscopic slides bearing biological samples.

(Ex. A, at 2:30-31, emphasis added.) The advantage of CytoLogix's electrical configuration—reducing the number of wires connecting the platform to the processor—applies to any "moving

platform." The platform need not rotate to enjoy the benefits of this aspect of CytoLogix's invention.

Finally, Ventana points to several statements in the prosecution history where CytoLogix argued that its invention improved on prior art carousel-type systems. Nowhere, however, did CytoLogix re-define the term "platform" to mean "rotary carousel," and nowhere did it state that its claims were limited to rotation. Accordingly, the claim term "platform" should be construed according to its plain and ordinary meaning: "a horizontal, flat surface."

B. The BenchMark XT/LT Satisfy the Moving and Platform Limitations

There is no dispute as to the relevant structure and operation of the BenchMark XT and LT. Accordingly, if the Court adopts the plain meaning definition of "platform," and reaffirms its earlier construction of "moving the slide platform and a liquid dispenser relative to each other," then the BenchMark XT and LT infringe the '261 patent. *See General Mills*, 103 F.3d at 983.

**REDACTED**

**REDACTED**

Accordingly, the BenchMark XT and LT infringe claims 1 and 2 of the '261 patent.

## **VI. THE '733 PATENT IS INFRINGED**

For the '733 patent, CytoLogix asserts two independent claims (1 and 10) and five dependent claims (4-6, 11, and 12).

In its November 2006 interrogatory response, Ventana contends that its instruments lack three limitations of claim 1 and three limitations of claim 10. (Ex. C, at 3.) Its response also offers proposed claim constructions for each of these allegedly missing limitations. (Id., at 5-7.)

In Appendix A, we provide claim charts showing where each limitation of the asserted claims of the '733 patent are found in the accused products, with citations to Ventana's product manuals and deposition testimony. In the sections below, we address claim construction and infringement for the specific limitations of independent claims 1 and 10 for which Ventana challenges infringement.

### A. Claim 1

In its supplemental interrogatory response, Ventana contends that its instruments lack the following three limitations of claim 1:

- (1) "a moving platform adapted to support a plurality of microscopic slides bearing biologic samples";

- (2) "electronic circuitry that supplies variable amounts of electrical power to said heating elements, said electronic circuitry being mounted on the moving platform...to heat said heating elements"; and
- (3) "a user interface through which desired temperatures for microscopic slides are specified".

(Ex. C, at 3.)

For terms (1) and (2), literal infringement turns entirely on claim construction—there is no factual dispute as to the structure and operation of the platform and electronic circuitry of Ventana's BenchMark XT and LT. All of CytoLogix's factual statements about Ventana's instruments cite directly to Ventana's product manuals or the testimony of its Rule 30(b)(6) witnesses. With respect to defense (3), there is a claim construction dispute, but Ventana's products meet the "user interface" limitation either way.

We discuss each defense separately below.

1. The BenchMark XT/LT Have a "moving platform"

Claim 1 requires a "moving platform" adapted to hold the slides. The parties' proposed claim constructions for this limitation are as follows:

Claim Language	CytoLogix's Proposed Construction	Ventana's Proposed Construction
"a moving platform adapted to support a plurality of microscopic slides bearing biologic samples"	a horizontal flat surface that moves and that is adapted to support a plurality of microscopic slides bearing biologic samples	<p>"a platform that moves during the automated processing of the slides, and that moves in order to index the slides."</p> <p>"The term 'platform' should be construed to mean a rotary carousel."</p> <p>(Ex. C, at 5-6.)</p>

The debate over the term "platform" was briefed above in connection with the '261 patent, and the same arguments apply here.

With respect to the word "moving," CytoLogix contends that the phrase should be given its plain meaning: a platform that moves. There is no basis for requiring that the movement must be "during automated processing of the slides" or that the movement must be "in order to index the slides."

There is no dispute that the Ventana slide tray does, in fact, move.

**REDACTED**

## 2. The BenchMark XT/LT Have the Required Electronic Circuitry

Ventana next challenges whether the moving platform has the electronic circuitry required by the claim.

### (a) Claim Construction

The relevant claim language, and the parties' proposed constructions, are as follows:

Claim Language	CytoLogix's Proposed Construction	Ventana's Proposed Construction
<p>"electronic circuitry that supplies variable amounts of electrical power to said heating elements, said electronic circuitry being mounted on the moving platform...to heat said heating elements to said desired temperatures"</p>	<p>Interconnected electronic components, mounted on the moving platform, that supplies electrical power to the heating elements in amounts that can be varied, in order to heat the heating elements to the desired temperatures.</p> <p>This can be accomplished, for example, by varying the</p>	<p>"electronic power supply circuitry that accepts voltage and current provided to the instrument and converts it into the required voltage and current supplied to the heating elements, mounted on the moving platform. The electronic circuitry delivers at least two different levels of electrical power (Watts) to the</p>

	intensity of the power or by cycling the power on and off.	heating elements in order to heat the heating elements. Zero power does not qualify as a level of power because heating does not occur when no power is delivered." (Ex. C, at 6.)
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CytoLogix, again, proposes a plain meaning claim construction. The claim requires electronic circuitry, mounted on the moving platform, that supplies electrical power to the heating elements, in variable amounts, to heat the biological samples to the desired temperatures.

"Variable amounts" of electrical power simply means that the energy provided to the heaters, over a period of time (e.g., part of a run), can be varied in order to heat the slide to different desired temperatures. There are at least two ways to supply "variable amounts" of electrical power. First, as in the specification's preferred embodiment, the heater can be turned on and off to achieve the desired temperature. The more time the heater is left on, the higher the temperature on the slide. (See above, pp. 10-11, and Ex. B, at 10:49-58; 11:18-19.) Second, the heaters can have high and low power settings (e.g., 10W and 20W), and the temperature can be varied by turning the power to "high" or "low."

An analogy would be using a space heater to heat a room to a desired temperature, e.g., 72 degrees. There are two ways this can be accomplished. First, the heater can be set to turn on whenever the room's temperature is below 72, and off when it is above 72. Alternatively, the heater can supply a steady, lower level of energy calibrated to keep the room at 72 (i.e., supply a power level that exactly balances the heat seeping out of the room). The claim covers both of these methods of supplying "variable amounts of electrical power."

Ventana's proposed construction for the "electronic circuitry" adds two limitations not found in the language of the claim, and *not found in the '733 patent's specification*. In other words, Ventana seeks a construction that would exclude the patent's preferred embodiment.

First, Ventana contends that "variable amounts of electrical power" requires that:

The electronic circuitry delivers at least two different levels of electrical power (Watts) to the heating elements in order to heat the heating elements. Zero power does not qualify as a level of power because heating does not occur when no power is delivered.

(Ex. C, at 6.) In other words, Ventana argues that the claim is limited to the second method of providing a variable amount of power: the "high/low" setting on the space heater. This is the method *not* disclosed by the patent's specification.

It is axiomatic that "[a] claim construction that excludes from its scope a preferred embodiment is rarely, if ever, correct and would require highly persuasive evidentiary support." *Bowers*, 320 F.3d at 1328. There is no basis here for construing the claim to cover only an embodiment *not* disclosed, and to exclude the embodiment which is disclosed.

Moreover, Ventana's construction of "variable amounts of electrical power" changes the word "amounts" to "levels." The claim does not say "variable levels of power," or "variable instantaneous power," (i.e., variable wattage), or even "variable power." It says "variable amounts of electrical power." As explained above, variable *amounts* means that the energy provided to the heaters, over a period of time (e.g., a portion of a run), can be varied in order to heat the slide to a desired temperature. Claims should not be construed in a manner which renders language in the claim superfluous. *Bicon, Inc. v. The Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) ("claims are interpreted with an eye toward giving effect to all terms in the claim"). The phrase "variable amounts of electrical power," therefore, should be construed to

cover both methods of varying electrical energy over time, including the method described in the preferred embodiment.<sup>8</sup>

The second limitation Ventana attempts to add to the electronic circuitry claim language concerns the source of power. The claim merely reads that the electronic circuitry on the moving platform "supplies...power to said heating elements." Ventana, however, construes this to require:

electronic power supply circuitry that accepts voltage and current provided to the instrument and converts it into the required voltage and current supplied to the heating elements.

The "voltage and current provided to the instrument," presumably, refers to the AC power provided by the local power source (i.e., the wall socket). Thus, Ventana argues that the electrical *transformer*<sup>9</sup> which converts this AC power into the direct current (DC) supplied to the heaters *must be located on the moving slide platform's electronic circuitry*. Nothing in the claim language suggests this absurd (and dangerous) electrical arrangement. In fact, it is directly contrary to the disclosure in the specification.

The specification, at Figs. 18A-18D, includes detailed circuit diagrams for a preferred embodiment's electronic circuitry (79) on the moving platform. In Figure 18B, 24V of DC power enters the circuitry at J13, pin 1, and then connects to each of the heaters, via CON4. Thus, when the power enters the circuitry (79), *it has already been converted from AC power to 24V DC Power*. The conversion, therefore, takes place *before* the electrical circuitry on the

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<sup>8</sup> CytoLogix also disagrees with Ventana's contention that "zero power does not qualify as a level of power." Even if the Court were to conclude that variable amounts of power means variable levels of power, zero is plainly a level of power. Thus, a heater with two power settings, zero watts and ten watts, would supply variable levels of power.

<sup>9</sup> Transformers are electrical devices which, e.g., step voltage up or down, or change AC to DC. The black rectangular box located on a laptop computer's power chord is a small transformer.

moving platform. The schematics show no transformers. The preferred embodiment's circuitry (79), therefore, merely *supplies* the power to the heaters, it doesn't convert it.<sup>10</sup>

Adopting Ventana's construction of "supplying power," therefore, would exclude the preferred embodiments disclosed in the specification, which is improper. *Bicon*, 441 F.3d at 950. Moreover, Ventana's construction would be contrary to the claim's plain language, which says nothing about "converting" current or voltage—it merely requires that the circuit supply the power. CytoLogix's proposed plain language construction, therefore, should be adopted.

(b) Infringement

Applying CytoLogix's construction, the BenchMark XT and LT plainly have "electronic circuitry that supplies variable amounts of electrical power to said heating elements, said electronic circuitry being mounted on the moving platform...to heat said heating elements."

**REDACTED**

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<sup>10</sup> Moreover, converting the power to DC on the moving platform would be dangerous. Running 120V AC power from a wall socket, through the entire machine, onto the moving slide platform, without first stepping it down to 24V DC, creates potential for electrocution. No skilled electrical engineer would understand the claim as calling for such an arrangement.

**REDACTED**

3. The BenchMark XT/LT Have the Required User Interface

Ventana's final noninfringement argument for claim 1 is that its instruments lack "a user interface through which desired temperatures for microscopic slides are specified."

(a) Claim Construction

The parties proposed claim constructions for this phrase are as follows:

Claim Language	CytoLogix's Proposed Construction	Ventana's Proposed Construction
"a user interface through which desired temperatures for microscopic slides are specified"	the device(s) through which the user (operator of the instrument) inputs information into the instrument specifying desired temperatures for microscopic slides	"a computer with an interface through which the user specifies desired temperatures for each of a plurality of microscopic slides." (Ex. C, at 7.)

In essence, Ventana argues that the user interface must be a "computer with an interface."

Ventana's argument here is very similar to an argument it tried—and lost—in the 2001 Case. In that case, the Court was asked to construe the phrase "a user interface through which a desired temperature for each microscopic slide is specified" in U.S. Patent No. 6,183,693. Ventana argued that "[u]ser interface means that portion of a general purpose computer having the ability to receive and interpret user inputs." (Ex. F, at 16.) CytoLogix countered that a "user interface" was not limited to a computer, and could be any device(s) through which a user inputs information to a computer. (Ex. G, at 7.) The Court agreed with CytoLogix, instructing the jury as follows:

**User Interface:** the device(s) through which the user (operator of the instrument) inputs information into the instrument.

(Ex. H.) Ventana did not challenge the Court's definition of "user interface" on appeal.

The Court should adopt the same definition here for "user interface." There is no reason why the "user interface" must be limited to a computer.<sup>11</sup> If the patentee had intended to so limit the claim, the claim would have read "a computer through which desired temperatures for

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<sup>11</sup> REDACTED

microscopic slides are specified," rather than "a user interface through which desired temperatures for microscopic slides are specified." A user interface can include, e.g., a computer screen, a mouse, a keyboard, a dial, a scanner, or any other combination of input devices.

(b) Infringement

Ventana's BenchMark XT/LT satisfies the "user interface" claim limitation. In fact, the BenchMark XT/LT has the required user interface under *either* CytoLogix's or Ventana's proposed claim constructions.

**REDACTED**

**REDACTED**

**REDACTED**

**REDACTED****4. The Remaining Limitations of Claims 1 and 4-6 Are Satisfied**

Ventana's supplemental interrogatory response only challenges infringement based on the above three limitations. As demonstrated by the claim charts in the Appendix, the remaining limitations of claim 1 (and claims 4-6, which depend from claim 1), are satisfied as well. Since there is no material factual dispute as to the structure and operation of the BenchMark XT/LT, summary judgment of infringement of claims 1 and 4-6, therefore, is warranted.

**B. Claim 10**

For claim 10, Ventana's supplemental interrogatory response identifies three claim limitations allegedly not found in its BenchMark XT/LT:

- (1) "a moving platform adapted to support a plurality of biologic samples";
- (2) "electronic circuitry mounted on the moving platform supplying electrical power to at least one heater"; and
- (3) "said electronic circuitry to provide an appropriate amount of electrical power to each of said heaters to heat the heaters to the processor-specified temperature".

(Ex. C, at 3.) Ventana's arguments here are essentially a repeat of its first two noninfringement defenses for claim 1. We discuss each argument separately below.

**1. The BenchMark XT/LT Have a "moving platform"**

The "moving platform" limitation of claim 10 is identical the language of claim 1, except that it substitutes the phrase "biologic samples" for "microscopic slides bearing biologic samples." The parties proposed claim constructions are as follows:

Claim Language	CytoLogix's Proposed Construction	Ventana's Proposed Construction
"a moving platform adapted to	a horizontal flat surface that	"a platform that moves during

support a plurality of biologic samples"	moves and that is adapted to support a plurality of biologic samples	the automated processing of the slides, and that moves in order to index the slides."  "The term 'platform' should be construed to mean a rotary carousel."  (Ex. C, at 5-6.)
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The difference between the "moving platform" limitations of claims 1 and 10 (elimination of the phrase "microscopic slides bearing") is immaterial for infringement purposes. Accordingly, the arguments discussed above under Part VI.A.1 apply equally here.

2. The BenchMark XT/LT Have Electronic Circuitry that Supplies Power

The parties proposed constructions for the first "electronic circuitry" limitation are as follows:

Claim Language	CytoLogix's Proposed Construction	Ventana's Proposed Construction
"electronic circuitry mounted on the moving platform supplying electrical power to at least one heater"	Interconnected electronic components, mounted on the moving platform, that supplies electrical power to at least one heater	"electronic power supply circuitry that accepts voltage and current provided to the instrument and converts it into the required voltage and current supplied to the heater, mounted on the moving platform." (Ex. C, at 6.)

This is a repeat of the "power supply" argument discussed under Part VI.A.2 above.

Ventana again argues that the electrical component which *converts* the voltage provided to the instrument (i.e., AC power from the wall socket) into the voltage and current supplied to the heater (DC) must be located on the moving platform.

For the reasons discussed in Part VI.A.2 above, Ventana's construction rewrites the claim in a manner that: (i) is inconsistent with the claim's plain language, (ii) would exclude the embodiments disclosed in the specification; and (iii) would result in an absurd electrical configuration (a transformer attached to a circuit board on a moving slide platform). There is no basis for such a radical rewrite of the claim.

Applying CytoLogix's plain meaning construction, this limitation is satisfied for the reasons discussed above in Part VI.A.2.

### 3. The BenchMark XT/LT Supply Appropriate Amounts of Power

The final limitation Ventana challenges is the requirement that the electronic circuitry on the moving platform supply "an appropriate amount" of power. The claim language, and the proposed constructions, are as follows.

Claim Language	CytoLogix's Proposed Construction	Ventana's Proposed Construction
"said electronic circuitry to provide an appropriate amount of electrical power to each of said heaters to heat the heaters to the processor-specified temperature"	the electronic circuitry provides an appropriate amount of electrical power to each of the heaters to heat the heaters to the processor-specified temperature	"electronic power circuitry that delivers at least two different levels of electrical power (Watts) to each of the heaters in order to heat the heaters to at least two different corresponding processor-specified temperatures. Zero power does not qualify as a level of power because heating does not occur when no power is delivered." (Ex. C, at 6-7.)

Ventana's construction for "an appropriate amount of electrical power" is identical to its proposed construction for "variable amounts of electrical power" in claim 1.

This proposed construction is wrong for the reasons discussed in Part VI.A.2 above. Moreover, Ventana's construction is even more strained here, since the language of claim 10

does not even include the word "variable." The claim language simply requires "an appropriate amount" of electrical power.

**REDACTED**

4. The Remaining Limitations of Claims 10 and 11-12 Are Satisfied

As with claim 1, Ventana's supplemental interrogatory response challenges only the above limitations of claim 10. The claim charts of the Appendix demonstrate that the remaining limitations of claim 10 (and claims 11 and 12, which depend from 10) are satisfied as well. Summary judgment of infringement of claims 10-12, therefore, is warranted.

**VII. CONCLUSION**

For the above reasons, and the reasons given in the Appendix and the co-filed Statement of Material Facts, CytoLogix requests that the Court: (a) adopt each of its proposed claim constructions above; (b) grant partial summary judgment of infringement of claims 1 and 2 of U.S. Patent No. 6,541,261; and (c) grant partial summary judgment of infringement of claims 1, 4-6, and 10-12 of U.S. Patent No. 6,783,733.

Dated: September 27, 2007

/s/ Michael E. Zeliger

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**APPENDIX:**  
**INFRINGEMENT CLAIM CHARTS**

**REDACTED**

**REDACTED**

**REDACTED**

**REDACTED**

**CERTIFICATE OF SERVICE**

I hereby certify that I caused the redacted version of the foregoing PLAINTIFF'S MEMORANDUM IN SUPPORT OF ITS MOTION FOR REMAINING CLAIM CONSTRUCTION AND PARTIAL SUMMARY JUDGMENT OF INFRINGEMENT to be served electronically on counsel of record by filing it with the CM/ECF system. I further certify that on this 27th day of September, 2007, I caused a copy of the unredacted version to be served by first class mail, postage prepaid, Defendant's counsel as follows:

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